Disease Fact Sheet Series

#### What is tularemia?

Tularemia, a disease that can affect both animals and humans, is caused by a bacteria, *Francisella tularensis*. Several species of wild animals can be infected (hares, rabbits, squirrels, muskrats, beavers, deer), and less commonly, certain domestic animals can be infected (especially sheep and cats). The rabbit is the species most often involved in tularemia outbreaks, but a small percentage of human tularemia cases are acquired from cats. The bacteria can also be found in ticks and deerflies. Tularemia in humans is relatively rare in Wisconsin, averaging about one case per year since 1980.

## Who gets tularemia?

Hunters, trappers or other people who spend a great deal of time out-of-doors are at a greater risk of exposure to tularemia than people with other occupational or recreational interests.

# How is tularemia spread?

Many routes of human exposure to the tularemia bacteria are known to exist. The common routes include: inoculation of the skin or mucous membranes with blood or tissue while handling, dressing or skinning infected game animals; contact with fluids from infected flies or ticks; the bite of infected ticks; and handling or eating insufficiently cooked rabbit or hare meat. Rabbit meat can remain infective even after being frozen for several years. Less common means of spread are: being scratched or bitten by an infected cat, drinking contaminated water, inhaling dust from contaminated soil, or handling contaminated animal pelts. Tularemia cannot be spread from one person to another.

## What are the symptoms of tularemia?

Tularemia is usually recognized by the presence of a skin lesion and swollen glands. Ingestion of the organism may produce a throat infection, intestinal pain, diarrhea and vomiting. Inhalation of the organism may produce a fever alone or combined with a pneumonia-like illness.

## How soon do symptoms appear?

Symptoms generally appear between 2 and 10 days after exposure, but usually after 3 days.

## What is the treatment for tularemia?

Various antibiotics are effective in treating tularemia.

# Does past infection with tularemia make a person immune?

Patients who recover from tularemia will develop a degree of immunity, however, reinfection has been reported.

# What can be done to prevent the spread of tularemia?

Rubber gloves should be worn when skinning or handling animals, especially rabbits. Meat from wild game, especially rabbit and squirrel meat should be cooked thoroughly before eating. Avoid bites of flies and ticks by the use of protective clothing, insect repellents, and checking for ticks frequently. Avoid drinking untreated water. Instruct children not to handle any sick or dead animals.